UNITED
NATIONS

ST

Secretariat

Distr.
GENERAL

ST/SG/AC.10/C.3/1997/68
29 September 1997

Original: ENGLISH

COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Sub-Committee of Experts on the Transport of Dangerous Goods
(Fourteenth session, Geneva, 8-18 December 1997, agenda item 4 (b))

GLOBAL HARMONIZATION OF SYSTEMS OF CLASSIFICATION AND LABELLING OF CHEMICALS

Physical hazards

New Zealand's position on the Globally harmonized chemical classification scheme

Transmitted by the Observer from New Zealand

We strongly support the concept and scope of the globally harmonized chemical classification system (GHS) as stated in the 1992 United Nations Conference on Environment and Development (UNCED) (Agenda 21, Chapter 19, Area B) [**Annex 1**].

We consider the terms of reference for the IOMC Co-ordinating Group for the Harmonisation of Chemical Classification Systems (CG/HCCS), as elaborated during its 8th Consultation On 24-25 June 1996 in Washington, USA. [**Annex 2**] accurately reflect the mandate of Agenda 21.

We endorse the approach taken by the Flammable Substances Working Group to harmonize the classification of flammable gases and flammable liquids. [As reported in ST/SG/AC.10/23/Add.4 (15 Jan 1997)]. The approach is to provide a lower threshold (cut of) value than is currently used in transport for the definition for flammable gases and flammable liquids that:

- creates a classification step below that presently used in transport for those substances that are above the new cut off;
- allows for controls on these substances for risks that may be present in non-transport parts of the life cycle, such as storage, use, manufacture, consumer and environmental safety.

We support this approach because:

it meets the Working Group's terms of reference;

it does not impose additional costs on the transport system;

the classification scheme is based on a substance's intrinsic hazards;

appropriate controls can be applied to those parts of the life cycle where there is significant risk;

it provides a mechanism for each country or region to apply controls to areas other than transport because of unique environmental requirements etc.

Proposed enhancement to the current harmonization proposals

The approach adopted by the Flammable Substances Working Group provides a model that should be used to establish harmonization of standards for other substances. Diagram 1 shows the relationship between a GHS and Recommendations for Transport, using the approach of the Flammable Substances Working Group.

Diagram 1 - Generic Model for GHS

UN Recommendations TDG **And Globally Harmonized System** Controls for Transport
Globally Harmonized System Allows for controls in non transport sectors. Occupational, public and environmental safety
No Controls Required

Explanation of Diagram 1:

Box 1 is equivalent to the Recommendations for Transport requirements

Box 2 would apply where the GHS cut off is lower than the Recommendations for Transport:

It represents substances with an intrinsic hazard that do not require control for transport;

It should be qualified with the following description:

> That controls for elements of the life cycle outside of the transport system may be required, for example, in storage or handling; and
>
> That for particular substances other transport controls may be required for other hazards e.g. desensitized peroxides or explosives where the desensitizing agent is itself flammable.

Box Three may apply where the GHS uses a general definition or formula. For example, organic peroxides are described by the formula R-0-0-R^ but some organic peroxides or mixtures do not meet the cut off tests for availability of oxygen:

> Substances in Box Three would not require controls for the hazardous property in question, and
>
> Box Three may not be required for a hazard depending on how the GHS cut off is stated

* * * * *

Annex 1

UNCED Agreement

The scope of the globally harmonized system (GHS) as stated in the 1992 United Nations Conference on Environment and Development (UNCED)(Agenda 21, Chapter 19, Area B) agreements is as follows:

Globally harmonized hazard classification and labelling systems are not yet available to promote the safe use of chemicals, inter alia, at the workplace or in the home. Classification of chemicals can be made for different purposes and is a particularly important tool in establishing labelling systems. There is a need to develop harmonized hazard classification and labelling systems, building on ongoing work. A globally harmonized hazard classification and compatible labelling system, including material safety data sheets and easily understandable symbols, should be available, if feasible, by the year 2000.

* * * * *

Annex 2

Clarification of the intended scope of a globally harmonized system of classification and labelling of chemicals

The following text was drafted and approved by the IOMC *CG/HCCS* during its 8th Consultation On 24-25 June 1996 in Washington, USA.

1. At the second meeting of the Intersessional Group of the Intergovernmental Forum on Chemical Safety (IFCS) held 5-8 March 1996 in Canberra Australia the CG/HCCS responded to **questions regarding the scope** of coverage for harmonization to clarify that it includes all hazardous chemicals regardless of their intended use. It was further acknowledged that as the work develops in these areas, there may be some limited instances where integration of certain products into the overall harmonised system may have to be delayed as there will be a need to research implications and consider the impact of the approach. ISG-2 recommended that the CG/HCC consider whether the group's terms of reference need to be clarified to specifically address the scope issue.

2. The terms of reference already include principles which guide the harmonization activities. The CG/HCCS is overseeing the development of a globally harmonised system for hazard classification, labelling, and material safety data sheets. The resulting harmonised system is to be based on the hazards arising from the intrinsic properties of chemicals and mixtures of chemicals. The principles further address the need to have a common and coherent basis for protection of transport, consumers, workers, and the environment thus encompassing the hazards arising from the chemical during all phases of its life cycle.

3. Intrinsic properties remain the same for a chemical or mixture even when it is used in different situations. For example, a chemical or mixture may have pesticidal uses. If the chemical presents a certain hazard, such as acute toxicity, that hazard will be present in the manufacturing or formulating facility, in the course of shipping the chemical, and in its application as a pesticide. It would therefore be inappropriate to select one part of that use cycle to provide protections via hazard classification and labelling, but ignore the fact that the chemical presents the same hazards from exposures at other stages of the chemical's Life cycle.

4. Therefore, the work on harmonization of hazard classification and labelling focuses on a harmonised system for all chemicals, and mixtures of such chemicals, including when they are intended to be used as pesticides, pharmaceuticals, food additives, and other chemical use categories that may be currently regulated by specific and strict standards. It is thus important for all national authorities to ensure that classification arid labelling for these diverse purposes are considered as positions are developed on the various criteria. Potential problems in accomplishing comprehensive harmonization of all types of chemicals and mixtures need to be identified early in the process so they can be addressed and resolved.

5. The possible exclusion of a defined chemical use category from the application of the harmonized system (or the postponement of work) will only be considered when its inclusion would result in an unacceptable delay in reaching a consensus.